

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-66. (Canceled)

67. (Previously Presented) A method of analyzing a sample for presence of a cancer cell or pathogen, comprising:

- (a) obtaining a sample from a patient containing a cell or population of cells;
- (b) introducing the cell or the population of cells into a zebrafish embryo that has not yet developed an immune system that would subject the cell or population of cells to immune rejection; and
- (c) detecting a property of the cell or the population of cells to indicate whether the cell or the population of cells comprises a cancer cell or pathogen.

68. (Previously Presented) The method of claim 67, wherein the sample is obtained from bone marrow, peripheral blood, a body fluid or a transplanted tissue.

69. (Previously Presented) The method of claim 67, wherein the sample is from a biopsy.

70. (Previously Presented) The method of claim 67, wherein the cell or the population of cells is a human cell or a population of human cells.

71. (Canceled)

72. (Previously Presented) The method of claim 67, wherein introducing comprises microinjecting the cell or the population of cells into the zebrafish embryo.

73. (Previously Presented) The method of claim 67, wherein the cell or the population of cells are microinjected into a blastula stage embryo.

74. (Previously Presented) The method of claim 67, wherein the cell or the population of cells are microinjected into the yolk of the zebrafish embryo.

75. (Previously Presented) The method of claim 67, wherein a population of cells are introduced into the zebrafish embryo.

76. (Previously Presented) The method of claim 75, further comprising culturing the zebrafish embryo after the population of cells is introduced, whereby cancer cells present in the cell population proliferate.

77. (Previously Presented) The method of claim 75, further comprising culturing the zebrafish embryo after the population of cells is introduced, whereby a pathogen present in the cell population is amplified.

78. (Previously Presented) The method of claim 75, wherein the property detected is cell proliferation or metastasis, detection of proliferation or metastasis being an indication that the population of cells contains cancer cells.

79. (Previously Presented) The method of claim 75, wherein the property detected is the rate of cell proliferation or metastasis.

80. (Previously Presented) The method of claim 78, wherein cell proliferation is detected by immunostaining with an antibody specific for cancer cells.

81. (Canceled)

82. (Previously Presented) The method of claim 78, wherein metastasis is detected by detecting movement of cells from the cell population relative to an initial site at which the cell population was introduced.

83. (Canceled)

84. (Previously Presented) The method of claim 67, wherein the pathogen is a bacterium, a virus or a fungus.